

REMARKS

Applicant is in receipt of the Office Action mailed June 2, 2006.

Claim Status

Claims 1-25 are pending.

Art Rejections

Claims 1-14, 18-19, and 21-25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Rousseau et al. (USPN 5524075; hereinafter referred to as Rousseau) in view of Deering et al. (USPN 6417861; hereinafter referred to as Deering).

Applicant respectfully traverses these 103 rejections.

Claim 1 recites:

A system for distributed convolution of stacked digital video data comprising:
a plurality of video data convolve units connected in a chain, wherein a video data convolve unit is operable to:
 receive video pixel data from a video output of a dedicated rendering unit;
 calculate partial convolution sums for a set of the video pixels that are located within a convolution kernel;
 receive accumulated partial convolution sums from a prior video data convolve unit in the chain, unless the video data convolve unit is the first video data convolve unit in the chain;
 add the calculated partial convolution sums to the previously accumulated partial convolution sums; and
 output new accumulated partial convolution sums to the next video data convolve unit in the chain, unless the video data convolve unit is the last video data convolve unit in the chain.

Neither Rousseau nor Deering, either singly or in combination, teach or render obvious "...a video data convolve unit is operable to: receive video pixel data from a video output of a dedicated rendering unit...".

The Examiner states at page 3, lines 5-6 that: "Rousseau et al. do not teach receiving video pixel from a video output of a dedicated rendering unit".

The Examiner further states at page 3, lines 6-7 that "Deering teaches video data convolve units (170A-170D) receive pixel data from rendering units (Fig. 3, rendering unit[s] 150A-150D)".

Deering, however, is silent on rendering units 150A-150D outputting video data. Deering clearly identifies the output of the rendering units 150A-D as samples and specifically not pixels at col. 11, lines 18-22:

"In the embodiment of graphics system 112 shown in the figure [Fig. 3], however, rendering units 150A-D calculate "samples" instead of actual pixel data. This allows rendering units 150A-D to "super-sample" or calculate more than one sample per pixel."

Deering is also silent on "receive video pixel data from a video output of a dedicated rendering unit". In fact, the phrase "video output" occurs only once in Deering in the paragraph at col. 31, lines 30-46:

"G. Soft-key Output

In some environments, users of graphics systems may desire the ability to output high quality anti-aliased rendered images that can be overlaid on top of a live video stream. While some systems exist that offer this capability, they are typically quite expensive. In one embodiment, graphics system 112 may be configured to inexpensively generate high quality over lays. In one embodiment, graphics system 112 may be configured to generate an accurate soft edge alpha

key for video output and down stream alpha keying. The alpha key may be generated by sample-to-pixel calculation units 170, which may perform a filtering function on the alpha values stored in sample buffer 162 to form "alpha pixels." Each alpha pixel may correspond to a particular output pixel. In one embodiment, the alpha pixels may be output using DAC 178A while the color output pixels may be output by DAC 178B."

This passage is clearly not at all related to a video output from a dedicated rendering unit.

Therefore, Applicant submits that claim 1 and its dependent claims are non-obvious and patentably distinguished over Rousseau and Deering for at least the reasons given above.

Applicant further submits that the independent claims 7, 10, 14, and 22 and their dependent claims are also non-obvious and patentably distinguished over Rousseau and Deering for at least the reasons given above in support of claim 1.

CONCLUSION

Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above-referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions.

The Commissioner is hereby authorized to charge any fees which may be required or credit any overpayment to Meyertons, Hood, Kivlin, Kowert & Goetzel P.C., Deposit Account No. 50-1505/5681-59600/JCH.

Respectfully submitted,

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